

# **Anatomy and Physiology**

## **Module Information**

**2022.02**, **Approved** 

## **Summary Information**

Module Code	4108BMBMOL
Formal Module Title	Anatomy and Physiology
Owning School	Pharmacy & Biomolecular Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

#### **Teaching Responsibility**

LJMU Schools involved in Delivery

Pharmacy & Biomolecular Sciences

## **Learning Methods**

Learning Method Type	Hours
Lecture	25
Practical	12
Tutorial	3
Workshop	10

## Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-CTY	CTY	January	12 Weeks

#### **Aims and Outcomes**

Aims	To provide an introduction to the major anatomical and physiological systems which underpin the study of Biomedical Science

### After completing the module the student should be able to:

#### **Learning Outcomes**

Code	Number	Description
MLO1	1	Describe the structure and functions of the cardiovascular, respiratory, digestive, renal, hepatic, skin and musculoskeletal systems
MLO2	2	Collect, interpret and present physiological data related to the renal system
MLO3	3	Recognize the integrated nature of human physiological systems and their importance in homeostasis
MLO4	4	Describe the way systems interact via the endocrine and/or nervous systems.

## **Module Content**

Outline Syllabus	The cardiovascular system: Introduction to the functions and components of blood, anatomy of the heart, structure and function of blood vessels. The respiratory system: Anatomy of the lungs, pulmonary ventilation, lung volumes and capacities The digestive system: Anatomy of the gastrointestinal tract (mouth, oesophagus, stomach, small intestine, pancreas, liver and large intestine). Digestion and absorption. The renal system: Anatomy of the kidney, functions of the kidney, glomerular filtration, tubular reabsorption, concentration of urine. The musculoskeletal system and skin: Anatomy of muscle and bone, skeletal muscle, movement (bones and muscles around joints), smooth muscle and skin characteristics. The nervous and endocrine system: Neural and endocrine systems and their integration. The hepatic system: appreciation of hepatic gross and micro architecture: cell types found in the liver and their functions, characteristics
Module Overview	
The module will provide an introduction to the aspects of anatomy and physiologunderpin further study of Biomedical Science. Material delivered in lectures will be with practical classes relating to physiology and genetics.	

### **Assessments**

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Centralised Exam	Exam	50	2	MLO4, MLO3, MLO1
Practice	Practical Class w/assessment	50	0	MLO2, MLO3, MLO1

### **Module Contacts**

#### **Module Leader**

Contact Name	Applies to all offerings	Offerings
Adam Lightfoot	Yes	N/A

#### Partner Module Team

Contact Name	Applies to all offerings	Offerings